L16 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN AN 1985:525205 CAPLUS Ware DN 103:125205 ED Entered STN: 19 Oct 1985 TIProtective transfer coatings Nitto Electric Industrial Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF DT Patent LΑ Japanese IC ICM B05D001-28 ICS B05D003-06 ICA C08J007-04 CC 42-11 (Coatings, Inks, and Related Products) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. --------------PΤ JP 60068083\_ A2 19850418 JP 1983-177463 19830926 <--PRAI JP 1983-177463 19830926 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES JP 60068083 ICM B05D001-28 ICS B05D003-06 ICA C08J007-04 Protective coatings with good adhesion to flat surfaces are formed without the use of organic solvents by coating a backing film with an aqueous composition containing a photoinitiator and a crosslinkable film-forming emulsion (prepared . by introducing unsatd. groups into the outer layer of particles obtained by 2-step emulsion polymerization), then pressing the coated side of the film against the surface, photocuring it, and removing the backing film. Thus, a dispersion of Et acrylate 40, Me methacrylate 25, trimethylolpropane triacrylate 5, and Na dodecylbenzenesulfonate (I) 1 part in 100 parts H2O was heated and treated with (NH4)2S208 to form a copolymer emulsion, to which was added dropwise a mixture of Bu acrylate 20, methacrylic acid 10, I 1, H2O 53, and (NH4)2S2O8 0.05 part and polymerization continued to give an emulsion of 2-layer particles, which was treated with 10 parts glycidyl methacrylate and 0.1 part Me2NPh and heated to obtain crosslinkable polymer (II) [98112-44-8] particles. Then 1 part benzoin Et ether and 5 parts neopentyl glycol diacrylate were added to form a photocurable composition, which was applied to a  $60-\mu$  polyethylene (III) [9002-88-4] film and dried to give a  $10-\mu$  coating layer. The coated film was pressed against a 0.1-mm corona discharge-treated polypropylene (IV) [9003-07-0] sheet and exposed to UV light, then the III film was peeled off, leaving a coating which showed good hardness and adhesion, with no warping of the IV sheet. Coatings applied similarly to stainless steel, Cu, and acrylic polymer sheets all showed good adhesion. ST solventless photocurable protective transfer coating; two step emulsion polymn coating; abrasion resistant photocurable transfer coating IT Acrylic polymers, uses and miscellaneous RL: USES (Uses) (sheets, abrasion-resistant transfer coatings for, solventless, photocurable) IT Coating materials (abrasion-resistant, transfer, photocurable, solventless, prepared by two-step emulsion polymerization) ΙT Coating materials

(abrasion-resistant, photocurable, solventless, transfer, prepared by

two-step emulsion polymerization)

ΙT Abrasion-resistant materials (coatings, transfer, photocurable, solventless, prepared by two-step emulsion polymerization) IT Polymerization (emulsion, two-stage, photocurable solventless transfer coatings prepared by, abrasion-resistant) IT 9002-86-2 9002-88-4 25038-59-9, uses and miscellaneous RL: USES (Uses) (backing sheets, for abrasion-resistant photocurable transfer coatings) 7440-50-8, uses and miscellaneous 9003-07-0 12597-68-1, uses and ITmiscellaneous RL: USES (Uses) (sheets, abrasion-resistant transfer coatings for, solventless, photocurable) IT 106-91-2DP, reaction products with Bu acrylate-cyclohexyl methacrylate-diethylene glycol dimethacrylate-2-ethylhexyl methacrylate-N-butoxymethylacrylamide copolymer 98101-04-3DP, reaction products with glycidyl methacrylate 98112-44-8P 98112-71-1P RL: PREP (Preparation) (transfer coatings, solventless, photocurable, abrasion-resistant. prepared by two-step emulsion polymerization) RN 9002-86-2 RN9002-88-4 RN25038-59-9 RN 7440-50-8 9003-07-0 RN RN 12597-68-1 RN 106-91-2DP RN 98101-04-3DP RN 98112-44-8P RN 98112-71-1P L16 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN 1985-131226 [22] WPTX DNN N1985-098649 DNC C1985-057063 Surface protection layer formation - by applying photohardenable compsn. to supporting sheet sticking it to protected surface and hardening with light. DC A82 G02 P42 (NITL) NITTO ELECTRIC IND CO PA CYC 1 PΙ JP 60068083 A 19850418 (198522)\* 7 ADT JP 60068083 A JP 1983-177463 19830926 PRAI JP 1983-177463 19830926 B05D001-28; B05D003-06; C08J007-04 IC AB 60068083 A UPAB: 19930925 Aqueous dispersion of photohardenable tacky compsn. containing acrylic photobridging polymer emulsion with film forming ability, which introduces, by covalent bond, photopolymeric unsatd. gp. to double layer structural emulsion particles obtd. by two-stage emulsion polymerisation, and a light sensitiser, are applied to the surface of self-supporting sheet (or film), and a composite sheet (or film) made up as photohardening tacky layer is stuck to the protected surface, and then exposed to light to harden the tacky layer. The self-supporting sheet (or film) is then peeled off, and thus a layer consisting of polymeric hardened substance is formed on the protected surface. USE/ADVANTAGE - The obtd. surface protection layer is used for semi-permanent prevention of damage to the surface of glass plate, wooden plate, decorative laminated sheet, plastic sheet, etc. 0/0 FS CPI GMPI FA

CPI: A04-F06C; A11-B05; A11-C02B; A12-B01E; G02-A02C

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TI FORMATION OF SURFACE PROTECTIVE LAYER

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PI **JP 60068083** A 19850418 Showa

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SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1985

IC ICM B05D001-28 ICS B05D003-06

ICA C08J007-04

AB PURPOSE: To form a satisfactory surface protective film by adhering a composite sheet formed by coating a specific water dispersible photosetting self-adhesive compsn. on a self-supportable sheet onto a surface to be adhered via a self- adhesive layer then irradiating light to said layer thereby curing the self-adhesive layer.

CONSTITUTION: A water dispersible photosetting self-adhesive compsn. containing an acrylic photocrosslinking polymer emulsion which is introduced with a photo polymerizable unsatd. group by covalent bond on the outside surface of emulsion particles having the double-layered structure obtd. by a two-stage emulsion polymerization method and has film forming power as well

as

a photosensitizer is prepared A composite sheet having the photosetting self-adhesive layer formed by coating such compsn. on a self-supportable sheet is adhered via the above- described self-adhesive layer on the surface to be adhered and thereafter light is irradiated thereto to cure the self-adhesive layer. Only the self-supportable sheet is then stripped and the surface protective layer consisting of the polymerized and cured matter is formed on the surface of the body to be adhered. COPYRIGHT: (C)1985,JPO&Japio